

# FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO  
Performance Materials NA, Inc.

AUTHORIZING THE OPERATION OF  
SRW Cogeneration Facility  
Fossil Fuel Electric Power Generation

LOCATED AT  
Orange County, Texas  
Latitude 30° 3' 22" Longitude 93° 45' 28"  
Regulated Entity Number: RN101986818

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site, emission units and affected source listed in this permit. Operations of the site, emission units and affected source listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site, emission units and affected source authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site, emission units and affected source.

Permit No:     O1882     Issuance Date: \_\_\_\_\_

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For the Commission

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## **General Terms and Conditions**

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

## **Special Terms and Conditions:**

### **Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting**

1. Permit holder shall comply with the following requirements:
  - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
  - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
  - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
  - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

- E. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 2 (Emissions Banking and Trading of Allowances) Requirements for an electric generating facility authorized under 30 TAC Chapter 116, Subchapter I:
  - (i) Title 30 TAC § 101.332 (relating to General Provisions)
  - (ii) Title 30 TAC § 101.333 (relating to Allocation of Allowances)
  - (iii) Title 30 TAC § 101.334 (relating to Allowance Deductions)
  - (iv) Title 30 TAC § 101.335 (relating to Allowance Banking and Trading)
  - (v) Title 30 TAC § 101.336 (relating to Emission Monitoring and Compliance Demonstration and Reporting)
  - (vi) The terms and conditions by which the emission limits are established to meet the quantity of allowances for the electric generating facility are applicable requirements of this permit
- F. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 101.372 (relating to General Provisions)
  - (ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)
  - (iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)
  - (iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)
  - (v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit
- 2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
  - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
  - B. Title 30 TAC § 101.3 (relating to Circumvention)
  - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
  - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
  - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
  - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)

- G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
  - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
  - I. Title 30 TAC § 101.222 (relating to Demonstrations)
  - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
    - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
    - (ii) Title 30 TAC § 111.111(a)(1)(E)
    - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
    - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
      - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
      - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
      - (3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)

- (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
- (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
  - (2) Records of all observations shall be maintained.
  - (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
  - (4) Compliance Certification:
    - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A).
    - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC

§ 122.145(2). The opacity test must be performed by a certified opacity reader.

- C. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- D. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
  - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
  - (ii) Sources with an effective stack height ( $h_e$ ) less than the standard effective stack height ( $H_e$ ), must reduce the allowable emission level by multiplying it by  $[h_e/H_e]^2$  as required in 30 TAC § 111.151(b)
  - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- 4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
  - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
  - B. Title 40 CFR § 60.8 (relating to Performance Tests)
  - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
  - D. Title 40 CFR § 60.12 (relating to Circumvention)
  - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
  - F. Title 40 CFR § 60.14 (relating to Modification)
  - G. Title 40 CFR § 60.15 (relating to Reconstruction)
  - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

#### **Additional Monitoring Requirements**

- 5. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).



## **New Source Review Authorization Requirements**

6. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
  - A. Are incorporated by reference into this permit as applicable requirements
  - B. Shall be located with this operating permit
  - C. Are not eligible for a permit shield
7. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
8. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

## **Compliance Requirements**

9. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
10. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:
  - A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:
    - (i) For sources in the Beaumont-Port Arthur Nonattainment area, 30 TAC § 117.9000
11. Use of Emission Credits to comply with applicable requirements:
  - A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115

- (ii) Title 30 TAC Chapter 117
    - (iii) Offsets for Title 30 TAC Chapter 116
  - B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:
    - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)-(d)
    - (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1
    - (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)-(d)
    - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122
    - (v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)
12. Use of Discrete Emission Credits to comply with the applicable requirements:
- A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115
    - (ii) Title 30 TAC Chapter 117
    - (iii) If applicable, offsets for Title 30 TAC Chapter 116
    - (iv) Temporarily exceed state NSR permit allowables
  - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
    - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
    - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
    - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
    - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
    - (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

## **Risk Management Plan**

13. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

## **Protection of Stratospheric Ozone**

14. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:
  - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.
  - B. The permit holder shall comply with 40 CFR Part 82, Subpart A for controlling the production, transformation, destruction, export or import of a controlled (ozone-depleting) substance or product as specified in 40 CFR § 82.1 - § 82.13 and the applicable Part 82 Appendices.
  - C. The permit holder shall comply with 40 CFR Part 82, Subpart A, § 82.13 related to recordkeeping and reporting requirements for the production and consumption of ozone depleting substances.

## **Permit Location**

15. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

## **Permit Shield (30 TAC § 122.148)**

16. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

## **Acid Rain Permit Requirements**

17. For units CTG-1 & CTG-2, located at the affected source identified by ORIS/Facility code 55120, the designated representative and the owner or operator, as applicable, shall comply with the following Acid Rain Permit requirements.

A. General Requirements

- (i) Under 30 TAC § 122.12(1) and 40 CFR Part 72, the Acid Rain Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP) and have an independent public comment process which may be separate from or combined with the FOP.
- (ii) The owner and operator shall comply with the requirements of 40 CFR Part 72 and 40 CFR Part 76. Any noncompliance with the Acid Rain Permit will be considered noncompliance with the FOP and may be subject to enforcement action.
- (iii) The owners and operators of the affected source shall operate the source and the unit in compliance with the requirements of this Acid Rain Permit and all other applicable State and federal requirements.
- (iv) The owners and operators of the affected source shall comply with the General Terms and Conditions of the FOP that incorporates this Acid Rain Permit.
- (v) The term for the Acid Rain permit shall commence with the issuance of the FOP that incorporates the Acid Rain permit and shall be run concurrent with the remainder of the term of the FOP. Renewal of the Acid Rain permit shall coincide with the renewal of the FOP that incorporates the Acid Rain permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring Requirements

- (i) The owners and operators, and the designated representative, of the affected source and each affected unit at the source shall comply with the monitoring requirements contained in 40 CFR Part 75.
- (ii) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 and any other credible evidence shall be used to determine compliance by the affected source with the acid rain emissions limitations and emissions reduction requirements for SO<sub>2</sub> and NO<sub>x</sub> under the ARP.
- (iii) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emission of other pollutants or other emissions characteristics at the unit under other applicable requirements of the FCAA Amendments (42 U.S.C. 7401, as amended November 15, 1990) and other terms and conditions of the operating permit for the source.

C. SO<sub>2</sub> emissions requirements

- (i) The owners and operators of each source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for SO<sub>2</sub>.
- (ii) As of the allowance transfer deadline the owners and operators of the affected source and each affected unit at the source shall hold, in the unit's compliance subaccount, allowances in an amount not less than the total annual emissions of SO<sub>2</sub> for the previous calendar year.
- (iii) Each ton of SO<sub>2</sub> emitted in excess of the acid rain emissions limitations for SO<sub>2</sub> shall constitute a separate violation of the FCAA amendments.

- (iv) An affected unit shall be subject to the requirements under (i) and (ii) of the SO<sub>2</sub> emissions requirements as follows:
  - (1) Starting January 1, 2000, an affected unit under 40 CFR § 72.6(a)(2); or
  - (2) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR § 72.6(a)(3).
- (v) Allowances shall be held in, deducted from, or transferred into or among Allowance Tracking System accounts in accordance with the requirements of the ARP.
- (vi) An allowance shall not be deducted, for compliance with the requirements of this permit, in a calendar year before the year for which the allowance was allocated.
- (vii) An allowance allocated by the EPA Administrator or under the ARP is a limited authorization to emit SO<sub>2</sub> in accordance with the ARP. No provision of the ARP, Acid Rain permit application, this Acid Rain Permit, or an exemption under 40 CFR §§ 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (viii) An allowance allocated by the EPA Administrator under the ARP does not constitute a property right.

D. NO<sub>x</sub> Emission Requirements

- (i) The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for NO<sub>x</sub> under 40 CFR Part 76.

E. Excess emissions requirements for SO<sub>2</sub> and NO<sub>x</sub>.

- (i) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
- (ii) If an affected source has excess emissions in any calendar year shall, as required by 40 CFR Part 77:
  - (1) Pay, without demand, the penalty required and pay, upon demand, the interest on that penalty.
  - (2) Comply with the terms of an approved offset plan.

F. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the affected source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the EPA Administrator.
  - (1) The certificate of representation for the designated representative for the source and each affected unit and all documents that demonstrate the

truth of the statements in the certificate of representation, in accordance with 40 CFR § 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.

- (2) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping (rather than a five-year period cited in 30 TAC § 122.144), the 3-year period shall apply.
  - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the ARP or relied upon for compliance certification.
  - (4) Copies of all documents used to complete an acid rain permit application and any other submission under the ARP or to demonstrate compliance with the requirements of the ARP.
- (ii) The designated representative of an affected source and each affected unit at the source shall submit the reports required under the ARP including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

G. Liability

- (i) Any person who knowingly violates any requirement or prohibition of the ARP, a complete acid rain permit application, an acid rain permit, or a written exemption under 40 CFR §§ 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to FCAA § 113(c).
- (ii) Any person who knowingly makes a false, material statement in any record, submission, or report under the ARP shall be subject to criminal enforcement pursuant to FCAA § 113(c) and 18 U.S.C. 1001.
- (iii) No permit revision shall excuse any violation of the requirements of the ARP that occurs prior to the date that the revision takes effect.
- (iv) The affected source and each affected unit shall meet the requirements of the ARP contained in 40 CFR Parts 72 through 78.
- (v) Any provision of the ARP that applies to an affected source or the designated representative of an affected source shall also apply to the owners and operators of such source and of the affected units at the source.
- (vi) Any provision of the ARP that applies to an affected unit (including a provision applicable to the DR of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR § 72.44 (Phase II repowering extension plans) and 40 CFR § 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR §§ 75.16, 75.17, and 75.18), the owners and operators and the DR of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the DR and that is located at a source of which they are not owners or operators or the DR.

- (vii) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or DR of such source or unit, shall be a separate violation of the FCAA Amendments.
- H. Effect on other authorities. No provision of the ARP, an acid rain permit application, an acid rain permit, or an exemption under 40 CFR §§ 72.7 or 72.8 shall be construed as:
- (i) Except as expressly provided in Title IV of the FCAA Amendments, exempting or excluding the owners and operators and, to the extent applicable, the DR of an affected source or affected unit from compliance with any other provision of the FCAA Amendments, including the provisions of Title I of the FCAA Amendments relating to applicable National Ambient Air Quality Standards or State Implementation Plans.
  - (ii) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the FCAA Amendments.
  - (iii) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law.
  - (iv) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
  - (v) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.
- I. The number of SO<sub>2</sub> allowances allocated by the EPA in 40 CFR Part 73 is enforceable only by the EPA Administrator.

#### **Cross-State Air Pollution Rule (CSAPR) Trading Program Requirements**

18. For units CTG-1 & CTG-2, located at the site identified by Plant code/ORIS/Facility code 55120, the designated representative and the owner or operator, as applicable, shall comply with the following CSAPR requirements.
- A. General Requirements
- (i) The owners and operators of the CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall operate the source and the unit in compliance with the requirements of the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program and all other applicable State and federal requirements.
  - (ii) The owners and operators of the CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall comply with the requirements of 40 CFR Part 97, Subpart EEEEE for CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program, and with the General Terms and Conditions of the Federal Operating Permit (FOP) that incorporates the CSAPR requirements.

B. Description of CSAPR Monitoring Provisions

- (i) The CSAPR subject unit(s), and the unit-specific monitoring provisions at this source, are identified in the following paragraph(s). These unit(s) are subject to the requirements for the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program.
  - (1) For unit(s) CTG-1 & CTG-2, the owners and operators shall comply with the continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart H for NO<sub>x</sub> and heat input.
  - (2) For unit(s) CTG-1 & CTG-2, the owners and operators shall comply with the continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart H for NO<sub>x</sub>, and with the excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D for heat input.
- (ii) The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR §§ 97.830 through 97.835 (CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR trading program.
- (iii) Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR §§ 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at <https://www.epa.gov/airmarkets/clean-air-markets-monitoring-plans-part-75-sources>.
- (iv) Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR Part 75, Subpart E and 40 CFR § 75.66 and § 97.835 (CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at <https://www.epa.gov/airmarkets/part-75-petition-responses>.
- (v) Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR §§ 97.830 through 97.834 (CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR § 75.66 and § 97.835 (CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at <https://www.epa.gov/airmarkets/part-75-petition-responses>.
- (vi) The descriptions of monitoring applicable to the unit(s) included above meet the requirement of 40 CFR §§ 97.830 through 97.834 (CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program), and therefore procedures for minor permit revisions, in accordance with 30 TAC § 122.217, may be used to add or change this unit's monitoring system description.

19. CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program Requirements (40 CFR § 97.806)



- A. Designated representative requirements
- (i) The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR §§ 97.813 through 97.818.
- B. Emissions monitoring, reporting, and recordkeeping requirements
- (i) The owners and operators, and the designated representative, of each CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR § 97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), § 97.831 (initial monitoring system certification and recertification procedures), § 97.832 (monitoring system out-of-control periods), § 97.833 (notifications concerning monitoring), § 97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and § 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (ii) The emissions data determined in accordance with 40 CFR § 97.830 through § 97.835 and any other credible evidence shall be used to calculate allocations of CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances under 40 CFR §§ 97.811(a)(2) and (b) and § 97.812 and to determine compliance with the CSAPR NO<sub>x</sub> Ozone Season Group 2 emissions limitation and assurance provisions under paragraph C. below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR §§ 97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.
- C. NO<sub>x</sub> emissions requirements
- (i) CSAPR NO<sub>x</sub> Ozone Season Group 2 emissions limitation
- (1) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR § 97.824(a) in an amount not less than the tons of total NO<sub>x</sub> emissions for such control period from all CSAPR NO<sub>x</sub> Ozone Season Group 2 units at the source.
- (2) If total NO<sub>x</sub> emissions during a control period in a given year from the CSAPR NO<sub>x</sub> Ozone Season Group 2 units at a CSAPR NO<sub>x</sub> Ozone Season Group 2 source are in excess of the CSAPR NO<sub>x</sub> Ozone Season Group 2 emissions limitation set forth in paragraph C.(i)(1) above, then:
- (a) The owners and operators of the source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall hold the CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances required for deduction under 40 CFR § 97.824(d); and

- (b) The owners and operators of the source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.

(ii) CSAPR NO<sub>x</sub> Ozone Season Group 2 assurance provisions

- (1) If total NO<sub>x</sub> emissions during a control period in a given year from all CSAPR NO<sub>x</sub> Ozone Season Group 2 units at CSAPR NO<sub>x</sub> Ozone Season Group 2 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO<sub>x</sub> emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR § 97.825(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR § 97.825(b), of multiplying -
  - (a) The quotient of the amount by which the common designated representative's share of such NO<sub>x</sub> emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO<sub>x</sub> emissions exceeds the respective common designated representative's assurance level; and
  - (b) The amount by which total NO<sub>x</sub> emissions from all CSAPR NO<sub>x</sub> Ozone Season Group 2 units at CSAPR NO<sub>x</sub> Ozone Season Group 2 sources in the state for such control period exceed the state assurance level.
- (2) The owners and operators shall hold the CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances required under paragraph C.(ii)(1) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (3) Total NO<sub>x</sub> emissions from all CSAPR NO<sub>x</sub> Ozone Season Group 2 units at CSAPR NO<sub>x</sub> Ozone Season Group 2 sources in the state during a control period in a given year exceed the state assurance level if such total NO<sub>x</sub> emissions exceed the sum, for such control period, of the state NO<sub>x</sub> Ozone Season Group 2 trading budget under 40 CFR § 97.810(a) and the state's variability limit under 40 CFR § 97.810(b).
- (4) It shall not be a violation of 40 CFR Part 97, Subpart EEEEE or of the Clean Air Act if total NO<sub>x</sub> emissions from all CSAPR NO<sub>x</sub> Ozone Season

Group 2 units at CSAPR NO<sub>x</sub> Ozone Season Group 2 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO<sub>x</sub> emissions from the CSAPR NO<sub>x</sub> Ozone Season Group 2 units at CSAPR NO<sub>x</sub> Ozone Season Group 2 sources in the state during a control period exceeds the common designated representative's assurance level.

- (5) To the extent the owners and operators fail to hold CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs C.(ii)(1) through (3) above,
  - (a) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
  - (b) Each CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs C.(ii)(1) through (3) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.

(iii) Compliance periods

- (1) A CSAPR NO<sub>x</sub> Ozone Season Group 2 unit shall be subject to the requirements under paragraph C.(i) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.830(b) and for each control period thereafter.
- (2) A CSAPR NO<sub>x</sub> Ozone Season Group 2 unit shall be subject to the requirements under paragraph C.(ii) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.830(b) and for each control period thereafter.

(iv) Vintage of allowances held for compliance

- (1) A CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance held for compliance with the requirements under paragraph C.(i)(1) above for a control period in a given year must be a CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.
- (2) A CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs C.(i)(2)(a) and (ii)(1) through (3) above for a control period in a given year must be a CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(v) Allowance Management System requirements. Each CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart EEEEE.

- (vi) Limited authorization. A CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance is a limited authorization to emit one ton of NO<sub>x</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:
  - (1) Such authorization shall only be used in accordance with the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program; and
  - (2) Notwithstanding any other provision of 40 CFR Part 97, Subpart EEEEE, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (vii) Property right. A CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance does not constitute a property right.

D. FOP revision requirements

- (i) No FOP revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances in accordance with 40 CFR Part 97, Subpart EEEEE.
- (ii) This FOP incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR §§ 97.830 through 97.835, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, subpart H), an excepted monitoring system (pursuant to 40 CFR Part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR § 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, subpart E). Therefore, the Description of CSAPR Monitoring Provisions for CSAPR subject unit(s) may be added to, or changed, in this FOP using procedures for minor permit revisions in accordance with 30 TAC § 122.217.

E. Additional recordkeeping and reporting requirements

- (i) Unless otherwise provided, the owners and operators of each CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
  - (1) The certificate of representation under 40 CFR § 97.816 for the designated representative for the source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR § 97.816 changing the designated representative.
  - (2) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart EEEEE.

(3) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program.

(ii) The designated representative of a CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program, except as provided in 40 CFR § 97.818. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under 30 TAC § 122.165.

F. Liability

(i) Any provision of the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program that applies to a CSAPR NO<sub>x</sub> Ozone Season Group 2 source or the designated representative of a CSAPR NO<sub>x</sub> Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the CSAPR NO<sub>x</sub> Ozone Season Group 2 units at the source.

(ii) Any provision of the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program that applies to a CSAPR NO<sub>x</sub> Ozone Season Group 2 unit or the designated representative of a CSAPR NO<sub>x</sub> Ozone Season Group 2 unit shall also apply to the owners and operators of such unit.

G. Effect on other authorities

(i) No provision of the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program or exemption under 40 CFR § 97.805 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO<sub>x</sub> Ozone Season Group 2 source or CSAPR NO<sub>x</sub> Ozone Season Group 2 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

## **Attachments**

**Applicable Requirements Summary**

**Additional Monitoring Requirements**

**Permit Shield**

**New Source Review Authorization References**

### **Applicable Requirements Summary**

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Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/ Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP-HRSG	Boilers/ Steam Generators/ Steam Generating Units	HRSG-1, HRSG-2	60Da-1	40 CFR Part 60, Subpart Da	D-Series Fuel Type #1 = Natural gas.
GRP-HRSG	Boilers/ Steam Generators/ Steam Generating Units	HRSG-1, HRSG-2	60Da-2	40 CFR Part 60, Subpart Da	D-Series Fuel Type #2 = Gaseous non-fossil fuel.
GRP-STACK	Emission Points/Stationary Vents/Process Vents	CTG-1, CTG-2	111A-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRP-TURBINE	Stationary Turbines	CTG-1, CTG-2	60GG-1	40 CFR Part 60, Subpart GG	No changing attributes.



### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-HRSG	EU	60Da-1	NOx	40 CFR Part 60, Subpart Da	§ 60.40Da(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart Da
GRP-HRSG	EU	60Da-1	SO2	40 CFR Part 60, Subpart Da	§ 60.40Da(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart Da
GRP-HRSG	EU	60Da-2	NOx	40 CFR Part 60, Subpart Da	§ 60.40Da(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart Da
GRP-HRSG	EU	60Da-2	SO2	40 CFR Part 60, Subpart Da	§ 60.40Da(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart Da

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-HRSG	EU	60Da-2	PM (Opacity)	40 CFR Part 60, Subpart Da	§ 60.40Da(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart Da
GRP-STACK	EP	111A-1	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
GRP-TURBINE	EU	60GG-1	SO <sub>2</sub>	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) [G]§ 60.334(h)(3)	None	None
GRP-TURBINE	EU	60GG-1	NO <sub>x</sub>	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	[G]§ 60.334(b) § 60.334(j) § 60.334(j)(1) [G]§ 60.334(j)(1)(iii) [G]§ 60.335(a) § 60.335(b)(2) § 60.335(b)(3)	[G]§ 60.334(b)	§ 60.334(j) § 60.334(j)(5)

**Additional Monitoring Requirements**

**Periodic Monitoring Summary ..... 26**

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRP-STACK	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111A-1
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	
Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	

**Permit Shield**

**Permit Shield ..... 28**

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/ Inclusive Units		
CTG-CT-1	N/A	40 CFR Part 63, Subpart Q	Industrial process cooling tower not operated with chromium-based water treatment chemicals after 09/08/1994.
ENGINE 1	N/A	30 TAC Chapter 117, Subchapter B	CI ICE is a portable emergency engine.
ENGINE 1	N/A	40 CFR Part 60, Subpart IIII	CI ICE is a portable emergency engine.
ENGINE 1	N/A	40 CFR Part 63, Subpart ZZZZ	CI ICE is a portable emergency engine.
GRP-HRSG	HRSG-1, HRSG-2	30 TAC Chapter 117, Commercial	Boiler is a new unit placed into service after 11/15/1992.
GRP-HRSG	HRSG-1, HRSG-2	40 CFR Part 60, Subpart D	Steam generating unit meets the applicability requirements under 40 CFR 60 Subpart Da.
GRP-HRSG	HRSG-1, HRSG-2	40 CFR Part 60, Subpart Db	Steam generating unit meets the applicability requirements under 40 CFR 60 Subpart Da.
GRP-HRSG	HRSG-1, HRSG-2	40 CFR Part 60, Subpart Dc	Steam generating unit has a maximum design heat input capacity greater than 100 MMBtu/hr.
GRP-HRSG	HRSG-1, HRSG-2	40 CFR Part 63, Subpart DDDDD	Waste heat boilers do not meet the definition of a boiler.
GRP-HRSG	HRSG-1, HRSG-2	40 CFR Part 63, Subpart JJJJJJ	Boiler is not located at an area source of HAPs.
GRP-STACK	CTG-1, CTG-2	30 TAC Chapter 115, Vent Gas Controls	Vent gas stream is not being used as a control device and originates from a non-combustion source.
GRP-TURBINE	CTG-1, CTG-2	30 TAC Chapter 117, Commercial	Stationary gas turbine is a new unit placed into service after 11/15/1992.
OWS-1	N/A	30 TAC Chapter 115, Water Separation	Water separator is designed solely to capture stormwater, spills, or exterior surface cleanup waters and is fully covered.

**New Source Review Authorization References**

<b>New Source Review Authorization References .....</b>	<b>30</b>
<b>New Source Review Authorization References by Emission Unit .....</b>	<b>31</b>

### New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX929	Issuance Date: 12/21/2018
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 40496	Issuance Date: 12/21/2018
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000



### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
CTG-1	GE PG7241 TURBINE	40496, PSDTX929
CTG-1	TURBINE/HRSG STACK	40496, PSDTX929
CTG-2	GE PG7241 TURBINE	40496, PSDTX929
CTG-2	TURBINE/HRSG STACK	40496, PSDTX929
CTG-CT-1	COOLING TOWER	40496, PSDTX929
ENGINE 1	PORTABLE EMERGENCY DIESEL ENGINE	106.511/09/04/2000
HRSG-1	DUCT BURNER	40496, PSDTX929
HRSG-2	DUCT BURNER	40496, PSDTX929
OWS-1	OIL WATER SEPARATOR	40496, PSDTX929

**Appendix A**

**Acronym List ..... 33**

## Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	actual cubic feet per minute
AMOC	alternate means of control
ARP	Acid Rain Program
ASTM	American Society of Testing and Materials
B/PA	Beaumont/Port Arthur (nonattainment area)
CAM	Compliance Assurance Monitoring
CD	control device
CEMS	continuous emissions monitoring system
CFR	Code of Federal Regulations
COMS	continuous opacity monitoring system
CVS	closed vent system
D/FW	Dallas/Fort Worth (nonattainment area)
EP	emission point
EPA	U.S. Environmental Protection Agency
EU	emission unit
FCAA Amendments	Federal Clean Air Act Amendments
FOP	federal operating permit
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
H/G/B	Houston/Galveston/Brazoria (nonattainment area)
H <sub>2</sub> S	hydrogen sulfide
ID No.	identification number
lb/hr	pound(s) per hour
MACT	Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr	Million British thermal units per hour
NA	nonattainment
N/A	not applicable
NADB	National Allowance Data Base
NESHAP	National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NO <sub>x</sub>	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	New Source Review
ORIS	Office of Regulatory Information Systems
Pb	lead
PBR	Permit By Rule
PEMS	predictive emissions monitoring system
PM	particulate matter
ppmv	parts per million by volume
PRO	process unit
PSD	prevention of significant deterioration
psia	pounds per square inch absolute
SIP	state implementation plan
SO <sub>2</sub>	sulfur dioxide
TCEQ	Texas Commission on Environmental Quality
TSP	total suspended particulate
TVP	true vapor pressure
U.S.C.	United States Code
VOC	volatile organic compound

**Appendix B**

**Major NSR Summary Table ..... 35**

**Major NSR Summary Table**

Permit Numbers: 40496 and PSDTX929					Issuance Date: December 21, 2018		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
Turbine and Duct Burner (DB) Hourly Limits with DBs Firing Natural Gas Only							
CTG-1	Turbine/HRSG	NOx	41.40	---	3, 4, 5, 6, 7, 8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26	3, 4, 5, 6, 7, 8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26	10, 12, 13, 20, 21, 22
		NOx (MSS)	205.48	---			
		CO	90.49	---			
		CO (MSS)	1022.56	---			
		VOC	9.83	---			
		VOC (MSS)	25.00	---			
		PM	23.06	---			
		SO <sub>2</sub>	35.60	---			
		NH <sub>3</sub>	32.80	---			
		H <sub>2</sub> SO <sub>4</sub>	3.60	---			
CTG-2	Turbine/HRSG	NOx	41.40	---	3, 4, 5, 6, 7, 8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26	3, 4, 5, 6, 7, 8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26	10, 12, 13, 20, 21, 22
		NOx (MSS)	205.48	---			
		CO	90.49	---			
		CO (MSS)	1022.56	---			
		VOC	9.83	---			
		VOC (MSS)	25.00	---			
		PM	23.06	---			
		SO <sub>2</sub>	35.60	---			
		NH <sub>3</sub>	32.80	---			
		H <sub>2</sub> SO <sub>4</sub>	3.60	---			

**Major NSR Summary Table**

Permit Numbers: 40496 and PSDTX929					Issuance Date: December 21, 2018		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
Turbine and DB Hourly Limits with DBs Firing Mixtures of Approved Gases							
CTG-1 and CTG-2	Two Turbines/HRSG	NOx	349.80	---	3, 4, 5, 6, 7, 8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26	3, 4, 5, 6, 7, 8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26	10, 12, 13, 20, 21, 22
		CO	682.70	---			
		VOC	25.90	---			
		PM	46.10	---			
		SO <sub>2</sub>	71.20	---			
		NH <sub>3</sub>	65.60	---			
		H <sub>2</sub> SO <sub>4</sub>	7.10	---			
Turbine and DB Combined Annual Limits for All Fuels Fired in DBs							
CTG-1 and CTG-2	Two Turbines/HRSG DBs	NOx	---	379.50	3, 4, 5, 6, 7, 8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26	3, 4, 5, 6, 7, 8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26	10, 12, 13, 20, 21, 22
		NOx (MSS)	---	3.57			
		CO	---	2345.50			
		CO (MSS)	---	9.14			
		VOC	---	63.00			
		VOC (MSS)	---	0.85			
		PM	---	189.40			
		SO <sub>2</sub>	---	12.60			
		NH <sub>3</sub>	---	259.60			
		H <sub>2</sub> SO <sub>4</sub>	---	1.30			
CTG-CT-1	Cooling Tower	PM	2.48	10.85			
CTGFUG	Fugitives (5)	VOC	0.01	0.09			
		NH <sub>3</sub>	0.16	0.70			

**Major NSR Summary Table**

Permit Numbers: 40496 and PSDTX929					Issuance Date: December 21, 2018		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
COALESCER	Natural Gas/Liquid Separator	VOC	0.23	1.00	25, 26	25, 26	
CTGNH3	Ammonia Tank Storage	NH <sub>3</sub>	0.02	0.10	9	9	
OWS	Oil/Water Separator	VOC	0.02	0.10			
UNLOAD	Unloading Ammonia (AQ) Trucks	NH <sub>3</sub>	0.02	0.10			
MAINT	Maintenance, Start-up and Shutdown	VOC	0.02	0.10	25, 26	25, 26	
CHEMSTOR	Water Treatment Chemical Storage	VOC	0.02	0.10	25, 26	25, 26	
FUEL-VENT	Fuel Venting	VOC	0.18	<0.01	25, 26	25, 26	
		CO	<0.01	<0.01			
ON-WASH	Online Turbine Water Washing	PM	0.03	<0.01	25, 26	25, 26	
OFF-WASH	Offline Turbine Washing	VOC	399.40	1.43	25, 26	25, 26	
COAL-LOAD	Loading of Coalescer Fluid	VOC	0.32	<0.01	25, 26	25, 26	
COAL-DEPR	De-pressuring of Coalescer	VOC	3.30	<0.01	25, 26 25, 26	25, 26 25, 26	
		CO	0.10	<0.01			
VAC-LOAD	Vacuum Loading from Tanks/Sumps	VOC	0.68	<0.01	25, 26 25, 26	25, 26 25, 26	
		NH <sub>3</sub>	2.12	<0.01			
TANK-	Draining and Degassing of Tank	NH <sub>3</sub>	26.49	0.01	25, 26	25, 26	
CEM-CAL	CEMS Calibration	NOx	0.06	<0.01	25, 26	25, 26	
		CO	0.04	<0.01			

Footnotes:

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3)

VOC	-	volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO <sub>x</sub>	-	total oxides of nitrogen
SO <sub>2</sub>	-	sulfur dioxide
PM	-	total particulate matter, suspended in the atmosphere, including PM <sub>10</sub> and PM <sub>2.5</sub> , as represented
PM <sub>10</sub>	-	total particulate matter equal to or less than 10 microns in diameter, including PM <sub>2.5</sub> , as represented
PM <sub>2.5</sub>	-	particulate matter equal to or less than 2.5 microns in diameter
CO	-	carbon monoxide
NH <sub>3</sub>	-	ammonia
H <sub>2</sub> SO <sub>4</sub>	-	sulfuric acid
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.



Jon Niermann, *Chairman*  
Emily Lindley, *Commissioner*  
Toby Baker, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

December 21, 2018

MR FERDINAND Y ARRIOLA  
UNIT MANAGER  
E I DU PONT DE NEMOURS AND COMPANY  
PO BOX 1089  
ORANGE TX 77631-1089

Re: Permit Renewal  
Permit Number: 40496  
Expiration Date: December 21, 2028  
E. I. du Pont de Nemours and Company  
Cogeneration Facility  
Orange, Orange County  
Regulated Entity Number: RN101986818  
Customer Reference Number: CN600128284  
Associated Permit Number: PSDTX929

Dear Mr. Arriola:

This is in response to your application Form PI-1R (General Application for Air Permit Renewals) concerning the proposed renewal of Permit Number 40496. Also, this will acknowledge that your application for the above-referenced renewal is technically complete as of November 19, 2018.

In accordance with Title 30 Texas Administrative Code Section 116.314(a), and based on our review, Permit Number 40496 is hereby renewed. Since you certified there were no changes to your existing permit, it is renewed as written and will be in effect for ten years from the date this renewal was issued. Please attach this letter and new general conditions (permit face) to your permit. We appreciate your careful review of the special conditions of the permit and assuring that all requirements are consistently met.

You may file a **motion to overturn** with the Chief Clerk. A motion to overturn is a request for the commission to review the executive director's decision. Any motion must explain why the commission should review the executive director's decision. According to 30 TAC Section 50.139, an action by the executive director is not affected by a motion to overturn filed under this section unless expressly ordered by the commission.

A motion to overturn must be received by the Chief Clerk within 23 days after the date of this letter. An original and 7 copies of a motion must be filed with the Chief Clerk in person, or by mail to the Chief Clerk's address on the attached mailing list. On the same day the motion is transmitted to the Chief Clerk, please provide copies to the applicant, the executive director's attorney, and the Public Interest Counsel at the addresses listed on the attached mailing list. If a motion to overturn is not acted on by the commission within 45 days after the date of this letter, then the motion shall be deemed overruled.

You may also request **judicial review** of the executive director's approval. According to Texas Health and Safety Code Section 382.032, a person affected by the executive director's approval must file a petition appealing the executive director's approval in Travis County district court within 30 days after the **effective date of the approval**. Even if you request judicial review, you still must exhaust your

Mr. Ferdinand Y Arriola  
Page 2  
December 21, 2018

Re: Permit Number: 40496

administrative remedies, which includes filing a motion to overturn in accordance with the previous paragraphs.

You are reminded that all maintenance activities at the site are required to be authorized and that each facility at the site must be in compliance with all rules and regulations of the Texas Commission on Environmental Quality (TCEQ) and of the U.S. Environmental Protection Agency at all times.

If you need further information or have any questions, please contact Mr. John Gott, P.E. at (512) 239-1238 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under authority delegated by the Executive Director of the TCEQ.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Wilson", with a stylized flourish at the end.

Michael Wilson, P.E., Director  
Air Permits Division  
Office of Air  
Texas Commission on Environmental Quality

Enclosure

cc: Air Section Manager, Region 10 - Beaumont

Project Number: 290346



## Texas Commission on Environmental Quality Air Quality Permit

*A Permit Is Hereby Issued To*  
**E. I. du Pont de Nemours and Company**  
*Authorizing the Continued Operation of*  
**Cogeneration Facility**  
*Located at Orange, Orange County, Texas*  
Latitude 30° 3' 5" Longitude -93° 45' 14"

Permit: 40496 and PSDTX929

Issuance Date: December 21, 2018

Expiration Date: December 21, 2028

  
\_\_\_\_\_  
For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)] <sup>1</sup>
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours;

keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]

8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)]<sup>1</sup>
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC § 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit.<sup>1</sup>

<sup>1</sup> Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

## **Special Conditions**

Permit Numbers 40496 and PSDTX929

### **Emission Standards and Operating Specifications**

1. This permit covers only those sources of emissions listed in the attached table entitled “Emission Sources - Maximum Allowable Emission Rates,” and those sources are limited to the emission limits and other conditions specified in the attached table. The annual rates are based on a rolling 12-month period. The permit authorizes planned maintenance, startup, and shutdown (MSS) activities and normal (or production) operations which comply with the emission limits in the maximum allowable emission rates table (MAERT). **(03/12)**
2. Fuel for the gas turbines is limited to pipeline-quality, sweet natural gas containing no more than 5.0 grains total sulfur per 100 dry standard cubic feet (dscf). Firing of any other fuel in the turbines will require authorization from the permitting authority.
3. The heat recovery steam generating (HRSG) unit duct burners shall be limited to firing the following fuels:
  - A. Pipeline-quality, sweet natural gas containing no more than 5.0 grains total sulfur per 100 dscf,
  - B. Volatile organic compounds (VOC) vent gas from the cyclohexane oxidation process,
  - C. High-pressure diamine off-gas,
  - D. Hydrogen off-gas,
  - E. Mixtures of the above-listed gas streams, and
  - F. Firing of any other fuel will require authorization from the permitting authority.
4. The HRSG unit duct burners are each limited to a maximum hourly heat input rate of 506 MMBtu per hour based on the higher heating value of fuel fired. The permit holder shall monitor and record HRSG unit duct burners’ fuel firing rates by fuel type fired to calculate emissions of contaminants not measured by a continuous emission monitoring system (CEMS) in order to demonstrate that the maximum allowable emissions will not be exceeded.
5. Upon request by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) or any air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel fired in the gas turbines and duct burners or shall allow air pollution control agency representatives to obtain a sample for analysis.
6. Each cogeneration train’s normal operating range is from 60 to 100 percent base load except for planned MSS periods. Steam augmentation or reduced load operation below base load not associated with planned MSS is authorized to accommodate periods of reduced power demand provided the maximum pounds per hour (lbs/hr) emission rates specified in the attached MAERT for Emission Point Nos. (EPNs) CTG-1 or CTG-2 is not exceeded. **(03/12)**

## Special Conditions

Permits Numbers 40496 and PSDTX929

Page 2

7. Except during MSS activities, the opacity shall not exceed five percent averaged over a six-minute period from each stack or vent. During MSS activities, the opacity shall not exceed 15 percent. Each determination shall be made by first observing for visible emissions while each facility is in operation. Observations shall be made at least 15 feet and no more than 0.25 mile from the emission point. If visible emissions are observed from an emission point, then the opacity shall be determined and documented within 24 hours for that emission point using Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Contributions from uncombined water shall not be included in determining compliance with this condition. Observations shall be performed and recorded quarterly. If the opacity exceeds five percent or 15 percent during MSS activities, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation. **(03/12)**

## Ammonia (NH<sub>3</sub>)

8. Concentrations of ammonia (NH<sub>3</sub>) exiting EPNs CTG-1 or CTG-2 shall not exceed 10 parts per million volume on a dry basis on an annual average or maximum hourly basis when corrected to 15 percent oxygen (O<sub>2</sub>) at any load except during periods of startup or shutdown.
9. The NH<sub>3</sub> handled at the cogeneration facility shall be in solution, and the solution shall contain no more than 30 percent NH<sub>3</sub> by volume.

## Federal Applicability

10. These facilities shall comply with applicable requirements of the Environmental Protection Agency (EPA) regulations in 40 CFR Part 60 on Standards of Performance for New Stationary Sources (NSPS) promulgated for:
  - A. General Conditions, Subpart A.
  - B. The duct burner-fired HRSGs are subject to the applicable requirements of Subpart Da, Standards of Performance for Electric Utility Steam Generating Units.
  - C. The gas turbines are subject to the applicable requirements of Subpart GG, Standards of Performance for Stationary Gas Turbines.
  - D. The holder of this permit shall monitor the fuel as specified in 40 CFR § 60.334(b). Any request for a custom monitoring schedule shall be made in writing and directed to the Enforcement Branch, EPA Region 6, Dallas, Texas. Any custom schedule approved by the EPA pursuant to 40 CFR § 60.334(b) will be recognized as an enforceable condition of this permit.

If any condition of this permit is more stringent than the regulations so incorporated, then for the purposes of complying with this permit, the permit shall govern and be the standard by which compliance shall be demonstrated.

### Initial Determination of Compliance

11. Sampling ports and platforms shall be incorporated into the design of all exhaust stacks according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director. **(03/12)**
12. The holder of this permit shall perform stack sampling and other testing as required to establish the actual quantities of air contaminants being emitted into the atmosphere from EPNs CTG-1 and CTG-2. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the appropriate EPA Reference Methods (RM) 201A and 202 or RM 5, modified to include back-half condensibles, for the concentration of particulate matter less than 10 microns in diameter (PM<sub>10</sub>) with the allowance for ambient particulates (i.e., subtracting out particulates entering the turbine); RM 8 or RM 6 or 6c for sulfur dioxide (SO<sub>2</sub>); RM 9 for opacity (consisting of 30 six minute readings as provided in 40 CFR §60.11[b]); RM 10 for the concentration of carbon monoxide (CO); RM 25A, modified to exclude methane and ethane, for the concentration of VOC (to measure total carbon as propane); and RM 20 for the concentrations of nitrogen oxide (NO<sub>x</sub>) and O<sub>2</sub> or equivalent methods.

Fuel sampling using the methods and procedures of 40 CFR § 60.335(d) may be conducted in lieu of stack sampling for SO<sub>2</sub>. If fuel sampling is used, compliance with NSPS, Subpart GG, SO<sub>2</sub> limits shall be based on 100 percent conversion of the sulfur in the fuel to SO<sub>2</sub>. Any deviations from those procedures must be approved by the Executive Director of the TCEQ prior to sampling. The TCEQ Executive Director or designated representative shall be afforded the opportunity to observe all such sampling.

The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

- A. The TCEQ Beaumont Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.
- (6) Procedure used to determine turbine loads during and after the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. A written proposed description of any deviation from sampling procedures specified in permit conditions or the TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The

TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures. Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for NSPS testing which must have the EPA approval shall be submitted to the TCEQ Regional Office.

- B. Air contaminants and diluents to be sampled and analyzed include (but are not limited to) NO<sub>x</sub>, CO, VOC, SO<sub>2</sub>, PM<sub>10</sub>, NH<sub>3</sub>, opacity, and O<sub>2</sub>. (As noted above, fuel sampling using the methods and procedures of 40 CFR §60.335[d] may be conducted in lieu of stack sampling for SO<sub>2</sub>).
- C. Each turbine shall be tested at a minimum of four points in the permitted operating range that is defined in Special Condition No. 6, including the minimum point in the range and at full load for the atmospheric conditions which exist during testing. The duct burners shall be tested at its maximum firing rate when firing natural gas while the turbine is operating as close to base load as possible. Additionally, the duct burners shall be tested at their proposed maximum firing rate when firing the hydrogen off-gas while the turbine is operating as close to base load as possible. Each tested turbine load shall be identified in the sampling report. The permit holder shall present at the pretest meeting the manner in which stack sampling will be executed in order to demonstrate compliance with emission standards found in NSPS Subparts Da and GG.
- D. Sampling as required by this condition shall occur within 60 days after achieving the maximum fuel-firing rate at which the turbines and duct burners will be operated but no later than 180 days after initial startup. Additional sampling shall occur as may be required by the TCEQ or EPA.
- E. Within 60 days after the completion of the testing and sampling required herein, two copies of the sampling reports shall be distributed as follows: **(03/12)**
  - (1) One copy to the EPA Region 6 Office, Dallas.
  - (2) One copy to the TCEQ Beaumont Regional Office.

#### **Continuous Determination of Compliance**

- 13. The holder of this permit shall install, calibrate, maintain, and operate a CEMS to measure and record the concentrations of NO<sub>x</sub>, CO, and diluent gases (O<sub>2</sub> or carbon dioxide [CO<sub>2</sub>]), from each Exhaust Stack, EPNs CTG-1 and CTG-2.
  - A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B, or an acceptable alternative. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Air, Air Permits Division for requirements to be met. The CEMS shall comply with the following requirements:



The holder of this permit shall assure that the CEMS meets the applicable quality assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1, or an acceptable alternative. Relative accuracy exceedances, as specified in 40 CFR Part 60, Appendix F, Section 5.2.3 and any CEMS downtime shall be reported to the appropriate TCEQ Regional Director, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.

All certified gas analysis exceedances of  $\pm 15$  percent accuracy and any CEMS downtime shall be reported to the appropriate TCEQ Regional Director, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director. **(03/12)**

- B. The monitoring data shall be reduced to hourly average values at least once everyday, using a minimum of four equally-spaced data points from each one-hour period. Two valid data points shall be generated during the hourly period in which zero and span is performed.
  - C. All monitoring data and quality-assurance data shall be maintained by the source for a period of two years and shall be made available to the TCEQ Executive Director or designated representative upon request. The data from the CEMS may be used to determine compliance with the conditions of this permit. Hourly average concentrations from EPNs CTG-1 and CTG-2 shall be summed to tons per year and used to determine compliance with the emission limits of this permit.
  - D. The appropriate TCEQ Regional Office shall be notified at least 21 days prior to any required relative accuracy test audit in order to provide them the opportunity to observe the testing.
  - E. If applicable, the CEMS may be required to meet the design and performance specifications, pass the field tests, and meet the installation requirements and data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 75, Appendix A.
- 14. If any emission monitor fails to meet specified performance, it shall be repaired or replaced as soon as reasonably possible, but no later than seven days after failure was first detected by any employee at the facility, unless written permission or verbal followed by written permission is obtained from the TCEQ Regional Office which allows for a longer repair/replacement time.
  - 15. The holder of this permit shall additionally install, calibrate, maintain, and operate continuous monitoring systems to monitor and record the average hourly natural gas consumption of the gas turbines, and the average hourly consumption of gas of the duct burners. The systems shall be accurate to  $\pm 5.0$  percent of the unit's maximum flow.
  - 16. The holder of this permit shall calculate or measure with a flow meter the total mass flow rate through the HRSG stack to ensure continuous compliance with the emission limitations specified in the attached MAERT. These data shall be stored on a computer hard drive and on computer disk or

other TCEQ accepted computer media. Records of this information will also be available in a form suitable for inspection.

17. The  $\text{NH}_3$  concentration in each Exhaust Stack (EPNs CTG-1 and CTG-2) shall be tested or calculated according to one of the methods listed below and shall be tested or calculated according to frequency listed below. Testing for  $\text{NH}_3$  slip is only required on days when the selective catalytic reduction (SCR) unit is in operation. **(03/12)**
  - A. The holder of this permit may install, calibrate, maintain, and operate a CEMS to measure and record the concentrations of  $\text{NH}_3$ . The  $\text{NH}_3$  concentrations shall be corrected and reported in accordance with Special Condition No. 8.
  - B. As an approved alternative, the  $\text{NH}_3$  slip may be measured using a sorbent or stain tube device specific for  $\text{NH}_3$  measurement in the 5 to 10 parts per million (ppm) range. The frequency of sorbent/stain tube testing shall be daily for the first 60 days of operation, after which, the frequency may be reduced to weekly testing if operating procedures have been developed to prevent excess amounts of  $\text{NH}_3$  from being introduced in the SCR unit and when operation of the SCR unit has been proven successful with regard to controlling  $\text{NH}_3$  slip. Daily sorbent or stain tube testing shall resume when the catalyst is within 30 days of its useful life expectancy. These results shall be recorded and used to determine compliance with Special Condition No. 8.
  - C. As an approved alternative to sorbent/stain tube testing or an  $\text{NH}_3$  CEMS, the permit holder may install and operate a second  $\text{NO}_x$  CEMS probe located between the duct burners and the SCR, upstream of the stack  $\text{NO}_x$  CEMS, which may be used in association with the SCR efficiency and  $\text{NH}_3$  injection rate to estimate  $\text{NH}_3$  slip. This condition shall not be construed to set a minimum  $\text{NO}_x$  reduction efficiency on the SCR unit. These results shall be recorded and used to determine compliance with Special Condition No. 8.
  - D. If the measured or calculated  $\text{NH}_3$  slip concentration exceeds 8 ppm at any time, the permit holder shall begin  $\text{NH}_3$  testing by either the Phenol-Nitroprusside Method, the Indophenol Method, or EPA Conditional Test Method (CTM) 27 on a quarterly basis, in addition to the weekly sorbent or stain tube testing. The quarterly testing shall continue until such time as the SCR unit catalyst is replaced; or if the quarterly testing indicates  $\text{NH}_3$  slip is 5 ppm or less, the Phenol-Nitroprusside/Indophenol/CTM 27 tests may be suspended until sorbent/stain tube testing again indicate 8 ppm  $\text{NH}_3$  slip or greater. These results shall be recorded and used to determine compliance with Special Condition No. 8.
  - E. Any other method used for measuring  $\text{NH}_3$  slip shall require prior approval from the TCEQ Regional Director.

### **Recordkeeping Requirements**

18. The following records shall be kept at the plant for the life of the permit. All records required in this permit shall be made available at the request of personnel from the TCEQ, EPA, or any air pollution control agency with jurisdiction.
  - A. A copy of this permit.
  - B. Permit application dated January 27, 1999, and subsequent representations submitted to the TCEQ.
  - C. A complete copy of the testing reports and records of the initial performance testing completed pursuant to Special Condition No. 12 to demonstrate initial compliance.
  - D. Stack sampling results or other air emissions testing (other than CEMS data) that may be conducted on units authorized under this permit after the date of issuance of this permit.
19. The following information shall be maintained by the holder of this permit in a form suitable for inspection for a period of five years after collection, and shall be made immediately available upon request to representatives of the TCEQ, EPA, or any air pollution control agency having jurisdiction: **(03/12)**
  - A. The NO<sub>x</sub>, CO, and dilutant gases (O<sub>2</sub> or CO<sub>2</sub>) CEMS emissions data from EPNs CTG-1 and CTG-2 to demonstrate compliance with the emission rates listed in MAERT.
  - B. Raw data files of all CEMS data including calibration checks and adjustments and maintenance performed on these systems.
  - C. Records of the hours of operation and average daily quantity of natural gas fired in the turbines and HRSG duct burners.
  - D. Records of the HRSG unit duct burners' hours of operation, average daily quantity of gas fired by fuel type, and calculated emissions of contaminants not measured by a CEMS. Emission factors corresponding to fuel type fired shall be taken from the permit application dated January 27, 1999, and subsequent representations. Other fuel-specific emission factors may be used to calculate emissions if the emissions factors are based upon stack sampling results of the units authorized by this permit.
  - E. Records of visible emissions/opacity observations pursuant to Special Condition No. 7.
  - F. Records of fuel sampling conducted pursuant to Special Condition No. 12D.
  - G. Records of NH<sub>3</sub> emissions sampling and calculations pursuant to Special Condition No. 17.
  - H. Records to demonstrate compliance with Special Condition Nos. 23 through 26. **(03/12)**

## Reporting

20. The holder of this permit shall submit to the TCEQ Beaumont Regional Office and the Air Enforcement Branch of the EPA in Dallas quarterly reports as described in 40 CFR § 60.7. Such reports are required for each emission unit which is required to be continuously monitored pursuant to this permit. In addition to the information specified in 40 CFR § 60.7(c), each report shall contain the hours of operation of the equipment authorized by this permit and a report summary of the periods of non-complying emissions and CEMS downtimes by cause.
21. For the purposes of reporting, non-complying emissions from equipment authorized by this permit shall be defined as follows:
  - A. Non-complying emissions of NO<sub>x</sub> or CO shall be defined as each one-hour period of operation, except during startup or shutdown, during which the average emissions as measured and recorded by the CEMS exceeds NO<sub>x</sub> or CO lbs/hr emission limitations specified in the MAERT.
  - B. Non-complying emissions of SO<sub>2</sub> shall be defined as emissions resulting from firing of any other fuel not authorized by the permitting authority or the firing of an authorized fuel, either of which causes an exceedance of the SO<sub>2</sub> limitation specified in the MAERT based on 100 percent conversion of the sulfur in the fuel to SO<sub>2</sub>.
  - C. Non-complying emissions of PM<sub>10</sub> and VOC shall be defined as emissions resulting from firing of any unauthorized fuel or the emissions resulting from the firing of an authorized fuel which exceeds the emission limitation specified in the MAERT.
  - D. Non-complying annual emissions shall be defined as any rolling 12-month period of operation during which the 12-month cumulative emissions exceeds the annual limits specified in the MAERT of this permit.
22. If the average NO<sub>x</sub> or CO stack outlet emission rate exceeds the maximum allowable emissions rate for more than one hour, the holder of this permit shall investigate and determine the reason for the exceedance and, if needed, make necessary repairs and/or adjustments as soon as possible. If the NO<sub>x</sub> or CO emission rate exceeds the emission rate in the MAERT for more than 24 hours, the permit holder shall notify the TCEQ Regional Office either verbally or with a written report detailing the cause of the increase in emissions, and all efforts being made to correct the problem.

## Maintenance, Startup, and Shutdown Requirements

23. This permit authorizes the emissions from the planned MSS activities listed in Attachment A, Attachment B, and the MAERT attached to this permit. Attachment A identifies the inherently low emitting (ILE) planned maintenance activities that this permit authorizes to be performed. Attachment B identifies the planned maintenance activities that are non-ILE planned maintenance activities that this permit authorizes to be performed. **(03/12)**

24. The holder of this permit shall operate the two turbines and HRSG duct burners (EPNs CTG-1 and CTG-2) in accordance with good air pollution control practice to minimize emissions during startup and shutdown, by operating in accordance with a written startup and shutdown plan. **(03/12)**
25. Authorized planned MSS activities that result in various emissions are as follows: **(03/12)**

Planned MSS Activity		Allowable No. of Activities or Hours per Year
Combustion Turbine Optimization:		
	Startups	8 times
	Tuning	2 times
	Shutdowns	8 times
	Green Rotor Run-Ins	2 times
Gaseous Fuel Venting		48 hours
Online Turbine Water Washing		730 washes
Offline Turbine Washing		8 washes
Depressuring of Coalescer		2 activities
Loading of Coalescer Fluid		890 gallons of liquid loaded
Vacuum Loading		105,279 gallons of materials loaded
Tank Draining and Degassing		1 tank
CEMS Calibration		1460 activities

- A. The methods used to estimate the emissions for each of the activities listed in this Special Condition are those based on the permit application submitted in January, 2011.
- B. The permit holder shall annually confirm the continued validity of the estimated potential to emit represented in the permit application for all ILE planned maintenance activities. The total emissions from all ILE planned maintenance activities (See Attachment A) shall be considered to be no more than the estimated potential to emit for those activities that are represented in the permit application.
- C. For each pollutant emitted during non-ILE planned maintenance activities (See Attachment B) whose emissions are measured using a CEMS, as per Special Condition No. 26A, the permit holder shall compare the pollutant's short-term (hourly) emissions during planned maintenance activities as measured by the CEMS to the applicable short-term planned MSS emissions limit in the MAERT.

- D. For each pollutant emitted during non-ILE planned maintenance activities (See Attachment B) whose emissions occur through a stack, but are not measured using CEMS as per Special Condition No. 26A, the permit holder shall do the following for each calendar month.
    - (1) Determine the total emissions of the pollutant through the stack that result from such non-ILE planned maintenance activities in accordance with Special Condition No. 26B.
    - (2) Once monthly emissions have been determined in accordance with Special Condition No. 25D(1) for 12 months after the MSS permit amendment has been issued, the permit holder shall add the rolling 12-month MSS emissions for the pollutant to the 12-month emissions (same 12 month period) that occurred and were emitted through the same stack during other operations. This total annual emission rate for the stack shall be compared to the applicable annual emission limit specified in the MAERT.
26. The permit holder shall determine the emissions during planned MSS activities for use in Special Condition No. 25 as follows. **(03/12)**
- A. For each pollutant whose emissions during normal facility operations are measured with a CEMS that has been certified to measure the pollutant's emissions over the entire range of a planned MSS activity, the permit holder shall measure the emissions of the pollutant during the planned MSS activity using the CEMS.
  - B. For each pollutant not described in Special Condition No. 26A, the permit holder shall calculate the pollutant's emissions during all occurrences of each type of planned MSS activity for each calendar month using the frequency of the planned MSS activity identified in work orders or equivalent records and the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application. In lieu of using the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application to calculate such emissions, the permit holder may determine the emissions of the pollutant during the planned MSS activity using an appropriate method, including but not limited to, any of the methods described in paragraphs 1 through 3 below, provided that the permit holder maintains appropriate records supporting such determination.
    - (1) Use of emission factor(s), facility-specific parameter(s), and/or engineering knowledge of the facility's operations.
    - (2) Use of emission data measured (by a CEMS or during emissions testing) during the same type of planned MSS activity occurring at or on a similar facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.
    - (3) Use of emissions testing data collected during a planned MSS activity occurring at or on the facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.

Special Conditions

Permits Numbers 40496 and PSDTX929

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27. With the exception of the emission limits in the MAERT attached to this permit, the permit conditions relating to planned MSS activities do not become effective until 180 days after issuance of the permit amendment that added such conditions. **(03/12)**

Date: March 12, 2012

## Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 40496 and PSDTX929

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

### Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
Turbine and Duct Burner (DB) Hourly Limits with DBs Firing Natural Gas Only				
CTG-1	Turbine/HRSG	NO <sub>x</sub>	41.40	-
		NO <sub>x</sub> (MSS)	205.48	-
		CO	90.49	-
		CO (MSS)	1022.56	-
		VOC	9.83	-
		VOC (MSS)	25.00	-
		PM	23.06	-
		SO <sub>2</sub>	35.60	-
		NH <sub>3</sub>	32.80	-
		H <sub>2</sub> SO <sub>4</sub>	3.60	-
CTG-2	Turbine/HRSG	NO <sub>x</sub>	41.40	-
		NO <sub>x</sub> (MSS)	205.48	-
		CO	90.49	-
		CO (MSS)	1022.56	-
		VOC	9.83	-
		VOC (MSS)	25.00	-
		PM	23.06	-
		SO <sub>2</sub>	35.60	-
		NH <sub>3</sub>	32.80	-
		H <sub>2</sub> SO <sub>4</sub>	3.60	-



**Emission Sources - Maximum Allowable Emission Rates**

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
Turbine and DB Hourly Limits with DBs Firing Mixtures of Approved Gases				
CTG-1 and CTG-2	Two Turbines/HRSG	NO <sub>x</sub>	349.80	-
		CO	682.70	-
		VOC	25.90	-
		PM	46.10	-
		SO <sub>2</sub>	71.20	-
		NH <sub>3</sub>	65.60	-
		H <sub>2</sub> SO <sub>4</sub>	7.10	-
Turbine and DB Combined Annual Limits for All Fuels Fired in DBs				
CTG-1 and CTG-2	Two Turbines/HRSG DBs	NO <sub>x</sub>	-	379.50
		NO <sub>x</sub> (MSS)	-	3.57
		CO	-	2345.50
		CO (MSS)	-	9.14
		VOC	-	63.00
		VOC (MSS)	-	0.85
		PM	-	189.40
		SO <sub>2</sub>	-	12.60
		NH <sub>3</sub>	-	259.60
		H <sub>2</sub> SO <sub>4</sub>	-	1.30
CTG-CT-1	Cooling Tower	PM	2.48	10.85
CTGFUG	Fugitives (5)	VOC	0.01	0.09
		NH <sub>3</sub>	0.16	0.70
COALESCER	Natural Gas/Liquid Separator	VOC	0.23	1.00

**Emission Sources - Maximum Allowable Emission Rates**

<b>Emission Point No. (1)</b>	<b>Source Name (2)</b>	<b>Air Contaminant Name (3)</b>	<b>Emission Rates</b>	
			<b>lbs/hour</b>	<b>TPY (4)</b>
CTGNH3	Ammonia Tank Storage	NH <sub>3</sub>	0.02	0.10
OWS	Oil/Water Separator	VOC	0.02	0.10
UNLOAD	Unloading Ammonia (AQ) Trucks	NH <sub>3</sub>	0.02	0.10
MAINT	Maintenance, Start-up and Shutdown	VOC	0.02	0.10
CHEMSTOR	Water Treatment Chemical Storage	VOC	0.02	0.10
FUEL-VENT	Fuel Venting	VOC	0.18	<0.01
		CO	<0.01	<0.01
ON-WASH	Online Turbine Water Washing	PM	0.03	<0.01
OFF-WASH	Offline Turbine Washing	VOC	399.40	1.43
COAL-LOAD	Loading of Coalescer Fluid	VOC	0.32	<0.01
COAL-DEPR	Depressuring of Coalescer	VOC	3.30	<0.01
		CO	0.10	<0.01
VAC-LOAD	Vacuum Loading from Tanks/Sumps	VOC	0.68	<0.01
		NH <sub>3</sub>	2.12	<0.01
TANK-DEGAS	Draining and Degassing of Tank	NH <sub>3</sub>	26.49	0.01
CEM-CAL	CEMS Calibration	NO <sub>x</sub>	0.06	<0.01
		CO	0.04	<0.01

**Emission Sources - Maximum Allowable Emission Rates**

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1  
NO<sub>x</sub> - total oxides of nitrogen  
SO<sub>2</sub> - sulfur dioxide  
PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented  
PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented  
PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter  
CO - carbon monoxide  
NH<sub>3</sub> - ammonia  
H<sub>2</sub>SO<sub>4</sub> - sulfuric acid
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

Date: March 12, 2012